

AT LAST...

AVAILABLE IMMEDIATELY AT
SUMMIT DISTRIBUTORS
INDUSTRIAL ELECTRONIC PARTS CENTER
916 MAIN ST. - BUFFALO 2, N. Y.
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...an SCR Line
that meets
cost,
size, and
performance
requirements for
**HIGH VOLUME
APPLICATIONS**

par

Creative design engineers get a special sense of accomplishment out of finding a device that not only saves money for their company but also helps them design new levels of performance and reliability into their equipment. In a nutshell, that's what Motorola's Economy Line has to offer — it literally crashes size, price and performance barriers which previously have limited the use of SCR's in high volume applications.

These units are ideal for power, motor speed and process control devices in all types of commercial and industrial equipment, including portable tools and appliances, as well as in light dimming and heating control units. Complete circuit assemblies are also available. In large production quantities, prices are as low as a dime per amp — and even evaluation quantities for prototype programs will cost out at extremely practical prices (a 200 volt, 8-amp unit is only \$1.60, 100-up).

In terms of low-cost, small-size, first-rate performance, low power consumption and consistently high quality, these devices represent the best SCR "find" on the market — an advantage which adds up to greater operating economy, lower warranty costs, and greater customer satisfaction with your equipment. It can also add up to competitive leadership in your field!

**FOR
EXAMPLE...**

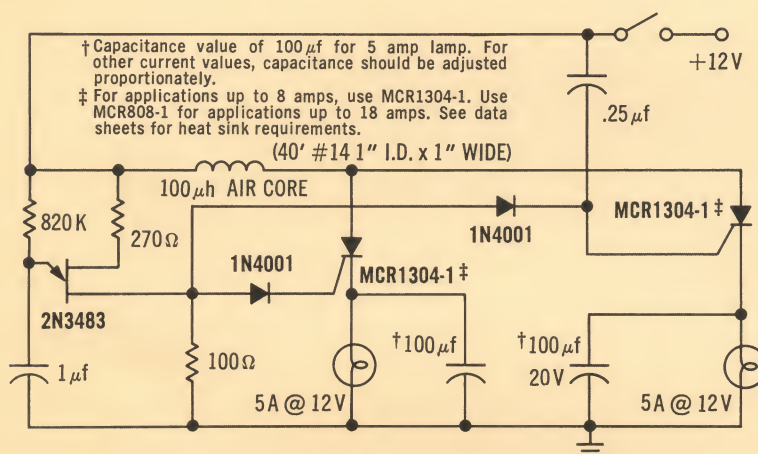
New MOTOROLA SCR "ECONOMY LINE" Offer

8-Ampere ELF*

- Smallest device available for this current level — case diameter is only .345"; case height: only .278".



TYPICAL APPLICATION — FLASHER CIRCUIT



Available in these package designs for mounting versatility . . .

MCR1304 SERIES	MCR1305 SERIES	MCR1604 SERIES	MCR1605 SERIES
• Smallest 8-ampere SCR available • 25 to 400 volts • Can switch up to 3.2 KW • Can control a full 8-amp d-c output; operating temperature range = -40 to +100°C	• 7/16" hex, 10-32 stud version of MCR1304 — For mounting ease • 8 amperes, 25 to 400 volts • Ideal for lamp dimmers, battery chargers, flashers, low-cost power supplies, and appliance motor controls	• Electrically same as MCR1304 series, including uniform low level gate characteristics • Anode lead is on same end as gate and cathode leads for special mounting convenience	• 8 amperes, 25 to 400 volts • Anode lead on opposite end of unit from gate and cathode leads • Like all Elf units, features a surge rating of 100 amperes

*Trademark of Motorola Inc.

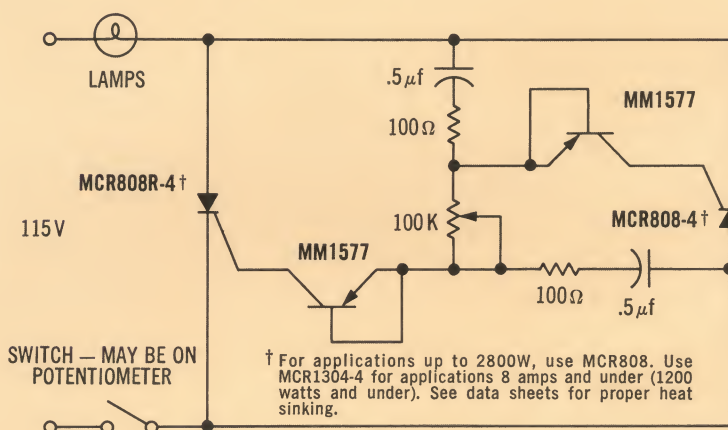
Offers Solid State Power Control at MASS PR

18-Ampere Pressfit



- Over 20 million Motorola power devices produced annually in this package

TYPICAL APPLICATION — LIGHT DIMMER



Available in these packages and polarities for design flexibility . . .

MCR808 SERIES	MCR808R SERIES REVERSE POLARITY	MCR1308 SERIES	MCR1308R SERIES REVERSE POLARITY
			
- The first pressfit SCR available 18 amperes, 25 to 400 V - Available in reverse polarity (MCR808R) - High surge current rating (225A); low forward voltage drop (1.1 volt typical at 18A d-c, $T_J = 100^\circ\text{C}$)	- Same as MCR808, except cathode is connected to case - Permits connection of a 2-SCR, 2-rectifier shorted bridge on a single heat sink - Industry's first SCR available in reverse polarity	11/16" hex, 1/4-28 stud package for mounting versatility - Same ratings as MCR808, including high-gain gate characteristics - Available in reverse polarity (MCR1308R)	- Can be mounted directly on equipment using chassis as cathode - Reduces costs by eliminating need for extra heat sink - Ideal for full-wave, 2-SCR back-to-back applications

PRODUCTION PRICES

SPECIFICATIONS AND PRICING INFORMATION

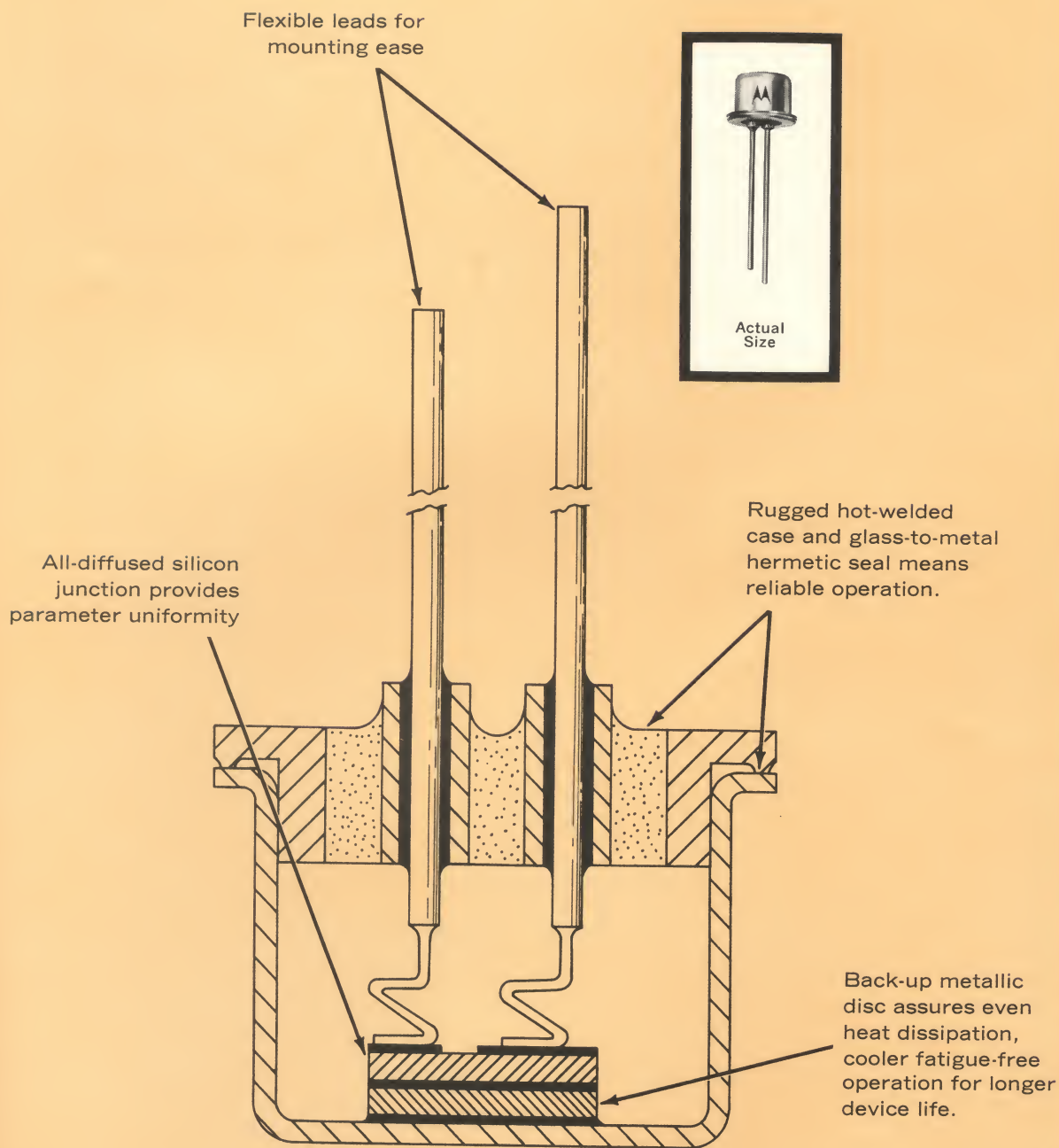
Evaluation quantities may be ordered off-the-shelf from your local Motorola Distributor at OEM factory prices!

(See listing on reverse side.)

Type	MAXIMUM RATINGS				ELECTRICAL CHARACTERISTICS			PRICE		Case Illustration
	T _J C°	Forward Current RMS amps	V _{FOM} & V _{ROM} volts	1/2 Cycle Surge Current @ T _{Jmax} amps	Max. Forward On Voltage @ T _{Jmax} volts	Max. Gate Firing Current @ 25°C mA	Holding Current @ 25°C mA typ	1 thru 99	100 thru 999	
MCR808-1④ MCR808-2④ MCR808-3④ MCR808-4④ MCR808-5④ MCR808-6④	100 100 100 100 100 100	18 18 18 18 18 18	25 50 100 200 300 400	225 225 225 225 225 225	18 Adc 1.5 1.5 1.5 1.5 1.5 1.5	50 50 50 50 50 50	20 20 20 20 20 20	3.05 3.35 4.05 4.75 6.95 9.90	2.45 2.70 3.25 3.80 5.60 8.10	
MCR1308-1④ MCR1308-2④ MCR1308-3④ MCR1308-4④ MCR1308-5④ MCR1308-6④	100 100 100 100 100 100	18 18 18 18 18 18	25 50 100 200 300 400	225 225 225 225 225 225	1.5 1.5 1.5 1.5 1.5 1.5	50 50 50 50 50 50	20 20 20 20 20 20	3.30 3.60 4.30 5.00 7.20 10.15	2.70 2.95 3.50 4.05 5.85 8.35	
MCR1304-1 MCR1304-2 MCR1304-3 MCR1304-4 MCR1304-5 MCR1304-6	100 100 100 100 100 100	8.0 8.0 8.0 8.0 8.0 8.0	25 50 100 200 300 400	100 100 100 100 100 100	5 Adc @ 25°C 1.3 1.3 1.3 1.3 1.3 1.3	20 20 20 20 20 20	8 8 8 8 8 8	1.50 1.65 1.80 2.00 3.15 4.50	1.20 1.30 1.45 1.60 2.50 3.60	
MCR1305-1 MCR1305-2 MCR1305-3 MCR1305-4 MCR1305-5 MCR1305-6	100 100 100 100 100 100	8.0 8.0 8.0 8.0 8.0 8.0	25 50 100 200 300 400	100 100 100 100 100 100	1.3 1.3 1.3 1.3 1.3 1.3	20 20 20 20 20 20	8 8 8 8 8 8	1.65 1.80 1.95 2.15 3.30 4.65	1.35 1.45 1.60 1.75 2.65 3.75	
MCR1604-1 MCR1604-2 MCR1604-3 MCR1604-4 MCR1604-5 MCR1604-6	100 100 100 100 100 100	8.0 8.0 8.0 8.0 8.0 8.0	25 50 100 200 300 400	100 100 100 100 100 100	1.3 1.3 1.3 1.3 1.3 1.3	20 20 20 20 20 20	8 8 8 8 8 8	1.62 1.77 1.92 2.12 3.27 4.62	1.32 1.42 1.57 1.72 2.62 3.72	
MCR1605-1 MCR1605-2 MCR1605-3 MCR1605-4 MCR1605-5 MCR1605-6	100 100 100 100 100 100	8.0④ 8.0④ 8.0④ 8.0④ 8.0④ 8.0④	25 50 100 200 300 400	100 100 100 100 100 100	1.3 1.3 1.3 1.3 1.3 1.3	20 20 20 20 20 20	8 8 8 8 8 8	1.62 1.77 1.92 2.12 3.27 4.62	1.32 1.42 1.57 1.72 2.62 3.72	

④ For reverse polarity devices, suffix the letter "R"; e.g. MCR808R-1 etc.

④ 1.5 amps average at T_A = 25°C



NEW MOTOROLA ELF*

Smallest 8-amp SCR available

"ECONOMY LINE" SCR's are available from these MOTOROLA INDUSTRIAL DISTRIBUTORS

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105 Bartley Drive (416) PLymouth 9-2222

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